

Guidance Memo
Prepared for Tiny Beam Fund

Living Well Through Food: Examining Popular Kenyan Media for Messages About Food

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Abstract

Researchers and health practitioners are concerned about ***how unhealthy diets are increasingly common throughout the globe***. Unhealthy diets are typically characterized by meals heavy in fats, sugars, animal-based food, and processed carbohydrates. While researchers track changing patterns of food production, trade, and distribution in low- and middle-income countries to make sense of how unhealthy diets are being adopted, ***less attention has been placed on attitudes and beliefs about food***.

This Guidance Memo examines Kenyan blogs, a magazine, and columns in a newspaper's weekly magazine to understand messages about meat-based, vegetarian, and vegan items. In terms of the frequency of images, vegetarian-related images tend to be featured most often in the blogs, meat and vegan-related images in the magazine, and meat in the newspaper's magazine column. In terms of thematic messages, ***ideas about lifestyle and nation are strong themes in food-related messages***. Despite differences across these media sources, in general, meat-based dishes are presented most strongly as a part of special moments and occasions. Vegetarian and vegan dishes are featured, but typically with a different emphasis.

The findings suggest that promoting Kenyan produce, culinary talent, and cuisine could support the lifestyle and national desires broadcast in media.

Introduction: Changing diets in low- and middle-income countries

*In low- and middle-income countries, the “nutrition transition” refers to a pattern of citizens eating fewer whole grains, legumes, and vegetables, and **eating more fats, sugars, animal-based food, and processed carbohydrates**^{1,2,3,4,5,6}. Health scholars and practitioners aim to curb the negative health outcomes that arise from these dietary changes, such as cardiovascular disease and different types of cancer^{4,7}.*

Drewnowski and Popkin explain that the nutrition transition involves more animal-based foods at the later stages of dietary transition¹. The EAT-Lancet Commission for Food, Planet, and Health recommends eating less meat and animal-based products to better support one’s physical health and the health of the planet⁸. On aggregate, red meat consumption in sub-Saharan Africa reaches recommended limits, but does not exceed them⁸. *Despite these findings, scholars and practitioners express concerns that “Westernized” fast-food eating patterns (i.e. late stage patterns of the nutrition transition) will emerge in Eastern Africa^{5,9}.*

Dietary patterns in Kenya

In Kenya, widespread dietary changes have yet to conform to the profile of a “Westernized” diet^{2,10}. While some may interpret Kenya’s dietary patterns as reflecting an early stage of the nutrition transition, it is important to recognize that **regions can have their own unique food patterns**. The structure of food production, trade, and distribution matters to the availability and accessibility of food, and are influential to the dietary patterns that emerge. However, ideas about what is good to eat and why are also important factors shaping dietary habits.

This project examines some of the cultural factors tied to eating meat-based, vegetarian, and vegan dishes in Kenya. The point of the project is to better understand what themes are tied to different patterns of consumption in Kenya, and how patterns of consumption are promoted.



¹ Drewnowski and Popkin 1997

² O'Neill 2015

³ Patel 2009

⁴ Popkin 2015

⁵ Raschke and Cheema 2008

⁶ Stuckler et al. 2012

⁷ World Health Organization 2015

⁸ EAT-Lancet Commission for Food Planet, and Health 2019

⁹ Steyn and Mchiza 2014

¹⁰ Kenya Markets Trust 2019

Conventional wisdom: Meat eating rises with national development

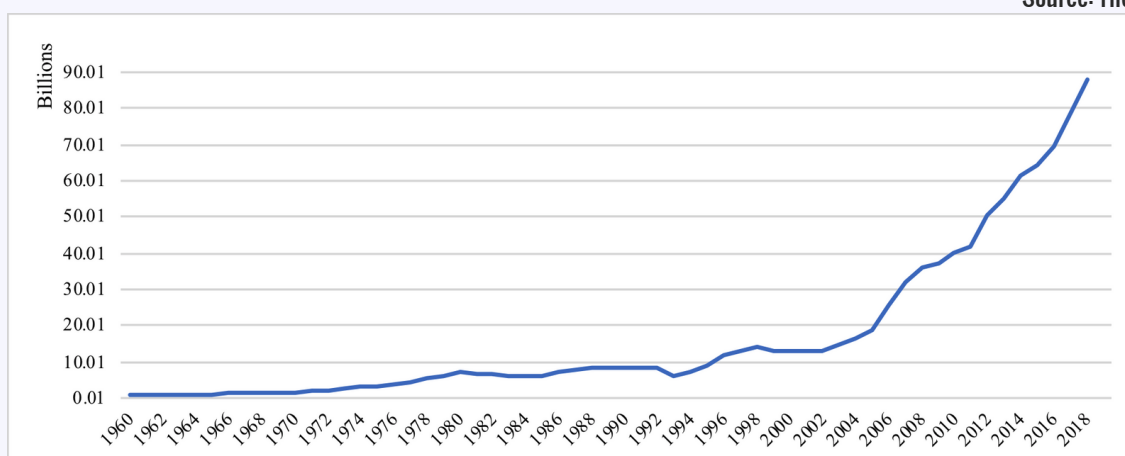
According to conventional wisdom, the prevalence of meat eating showcases how much money citizens have to dispose of¹¹ Meat and animal products tend to be more expensive, and when citizens are widely consuming these items, the inference is that citizens have money to enjoy a more comfortable standard of living¹¹. These links are not as certain as may seem¹¹.

From examining Graph 1, it is clear that Kenya's Gross Domestic Product increased from 1961 to 2018. When it comes to the caloric value of meat available per person in the food supply, availability has fluctuated but has not exactly risen. ***Since meat availability has not increased with rising GDP, this suggests that the relationship amongst national development, wealth, and meat eating in Kenya is not straightforward, and needs qualification.***

Please note:
The way that food balances are calculated by Food and Agriculture Organization of the United Nations changed (for data) from 2014 onward, and this is why the years of interest in Graph 1 (1961-2018) and Graph 2 (1961-2013) do not fully align. Data on meat availability in Kenya in kcal/capita/day for the years 2014 to 2017 do not show a dramatic uptick even with the new approach, and range from a low of 70 kcal/capita/day in 2014 to a high of 80 kcal/capita/day in 2017.

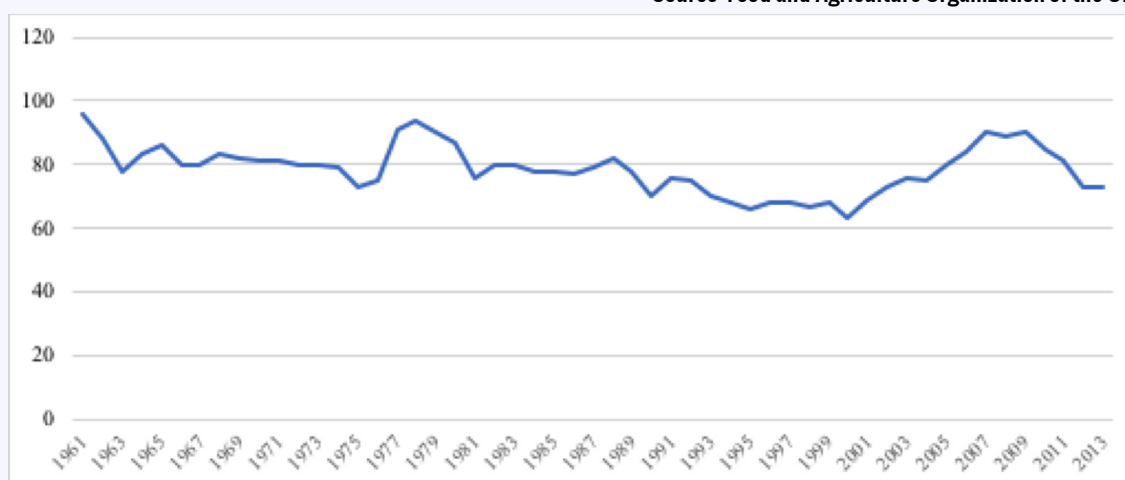
Graph 1: Kenya's GDP in current US dollars, 1961-2018

Source: The World Bank (2020)



Graph 2: Meat availability in Kenya in kcal/capita/day, 1961-2013

Source: Food and Agriculture Organization of the United Nations (2020)



Trade, production, and patterns of meat and animal-based diets

Heightened trade in food, liberalized rules on trade, and the transnational reach of food companies are some of the factors contributing to dietary changes. In the period following World War II until the early 1980s, countries tended to exchange surplus items in international markets¹². Currently, the World Trade Organization supports liberalized trade amongst member states, and has rules on the level of support countries can provide to their agricultural sectors. The emphasis on global, liberalized trade is one of the reasons why multinational food companies are able to source supplies from, work with, and take over domestic food industries in low- and middle-income countries^{13,14}.

Research illustrates that heightened imports of meat and animal products are linked to their increased consumption^{15,16}. Although importing practices may change, **for now, it does not seem to be the case that imports are driving an increase in the consumption of meat in Kenya.** In Kenya, most meat is raised and consumed domestically, as opposed to imported^{10,17}. Many households keep chicken, and one study found that more than two-thirds of Kenyan households raised chicken¹⁷.



The practices of domestic industries also impact national dietary profiles. Imported feed can support industrialized domestic meat and dairy industries, influencing diets^{11,15}. In Kenya, the cost of commercial animal feed is high, and industrialized farming is generally more expensive than free range farming¹⁸. To be sure, “where market access is guaranteed,” broiler chicken appears to be a dominant mode of farming¹⁹. Zero-grazing has been recommended as a way to fatten livestock and farm more efficiently on less land area. Nonetheless, **the high cost of commercial feed and labour in intensive farming are a few reasons why farming continues to be non-intensive^{10,18}.**

Food retail and patterns of meat and animal-based diets

Trade in food, and the organization of domestic industries, influence the availability and cost of food. However, **where people buy their food from, such as from supermarkets versus fresh markets and kiosks, seems to impact the kinds of items people consume²⁰.** Food retailers are able to promote products and offer a variety of options at different price points^{2,20}. In their study of supermarket shopping and dietary patterns, Demmler et al.²⁰ found that those who shopped at supermarkets consumed more meat, fish, dairy, and eggs than those who did not.

Although supermarkets seem to be growing in presence, signifying that widespread dietary changes will appear, their existence can reinforce local food economies, which temper dietary changes²¹. Local butcheries continue to be popular, and in a recent study of Kenyan meat practices, most participants stated that they preferred to purchase meat from nearby butcheries¹⁰. Moreover, this study revealed that decisions to buy meat and where to buy it from involved a few different people¹⁰. This suggests that when offered a better deal, or something new to try, whomever runs errands may not change the shopping list¹⁰.

¹² Daviron 2008 ¹³ Hawkes 2005 ¹⁴ Stuckler and Nestle 2012 ¹⁵ Hawkes 2010 ¹⁶ Thow and Hawkes 2009 ¹⁷ Otieno and Ogutu 2019
¹⁸ Tegemo Institute 2016 ¹⁹ Carron et al. 2017, p. 91 ²⁰ Demmler, Ecker, and Qaim 2018 ²¹ Abrahams 2010

Cultural factors enabling patterns of food consumption

*Even though the nutrition transition describes globally similar dietary patterns, regions have their own unique food patterns that warrant attention*²². Trade, farm, and retail options influence the availability, cost, and ease of accessing various food items and should be examined. However, what to eat, when to eat it, who with, and how so are learned by people. **Research illustrates that the meanings people give to food items matter to the patterns that emerge**²³. To better understand what changes are underway, and the possibilities of new dietary patterns, it is important to pay attention to how different food choices make sense to people.

Food is loaded with multiple purposes and meanings. For instance, pregnancy is a specific time of life when food habits are likely to be under scrutiny²³. Rianga et al.²³ found that in the ethnic and regional community of their project, the “culturally prescribed nutritional taboos and beliefs” (p. 15) observed during pregnancy were largely informed by elder women, as opposed to health practitioners. They found that offal meat, meat, and eggs were largely avoided by women during pregnancy in order to ease birth and improve maternal outcomes²³. Their work revealed findings that may be initially counter-intuitive, such as women limiting their food consumption in order to improve health outcomes.



All kinds of food teachers exist. While the authors illustrated how cultural taboos and beliefs worked in tandem with nutritional practices, they also illustrated how people are taught what to eat, why, and when²³. Teaching about food can involve ideological efforts. For instance, Christian missionaries and British colonists sought to change Kenyans' food habits to better serve their political, economic, and ideological interests^{24,25,26}.



*Although nationally-focused messages about good food can be part of ideological projects, regular media broadcasts have the potential to showcase many points of view*²⁷. Television stations, radio broadcasts, online newspapers, and blogs have proliferated over the past twenty-five years²⁷. When it comes to food, the kinds of messages broadcast by these sources is worth examining.

Otieno and Ogutu¹⁷ explain that most of the people in their study on consumers' interest in animal welfare were informed of the issue via the media, with media referring to newspaper articles, radio broadcasts, and television shows. Newspapers typically provide information about matters of the day. Magazines showcase advertisements alongside articles, and inform the public about the latest trends. On television, advertisements and cooking shows make lifestyle claims, such as if an item is healthy, or if a celebrity uses the product²⁸. Blogs are a site for authors to selectively engage with food trends, and explain how they as individuals relate to food items.

²² Mintz and Schlettwein-Gsell 2001 ²³ Rianga, Broerse, and Nangulu 2017 ²⁴ Ochwada 2002 ²⁵ Brownhill 2009 ²⁶ Cusack 2000 ²⁷ Amutabi 2013 ²⁸ Mchiza et al. 2013

Methodology

Since regions have unique experiences of changing dietary habits in the face of heightened trade, liberalization, and global integration, it is worthwhile to examine the messages linked to meat-based, vegetarian, and vegan diets. Different media types will be reviewed to better understand how meat and animal-based foods are promoted.

Content analysis techniques are used in the social sciences to examine recurring themes in texts. Texts include “anything written, visual or spoken that serves as a medium for communication”²⁹. In this project, the texts analyzed are blogs (*Kaluhi’s Kitchen*, *Pika Chakula*), a magazine (*Yummy Magazine*), and columns in a newspaper’s magazine (*Evewoman*). Both visual images and writing were analyzed.

Kaluhi’s Kitchen and *Pika Chakula* are award-winning blogs. *Yummy Magazine* is available online and in print form in various malls and stores in Nairobi. *The Standard* releases a magazine in its Saturday newspaper called *Evewoman*, and some of its content is also available online.

A total of 320 recipe-focused blogs from *Kaluhi’s Kitchen* were examined, and date from July 27th, 2014 to December 11th, 2019. A total of 198 blogs from *Pika Chakula* were examined. *Pika Chakula* blogs are not dated, and all blogs that were available prior to April 9th, 2020 were analyzed. Eleven issues of *Yummy Magazine* were analyzed, and drawn from the months of June and December for the years 2014 to 2019. *Evewoman* recipe columns from December 13th, 2014 to February 9th, 2020 were examined, for a total of 27 columns.

Image
Count

Thematic
Review

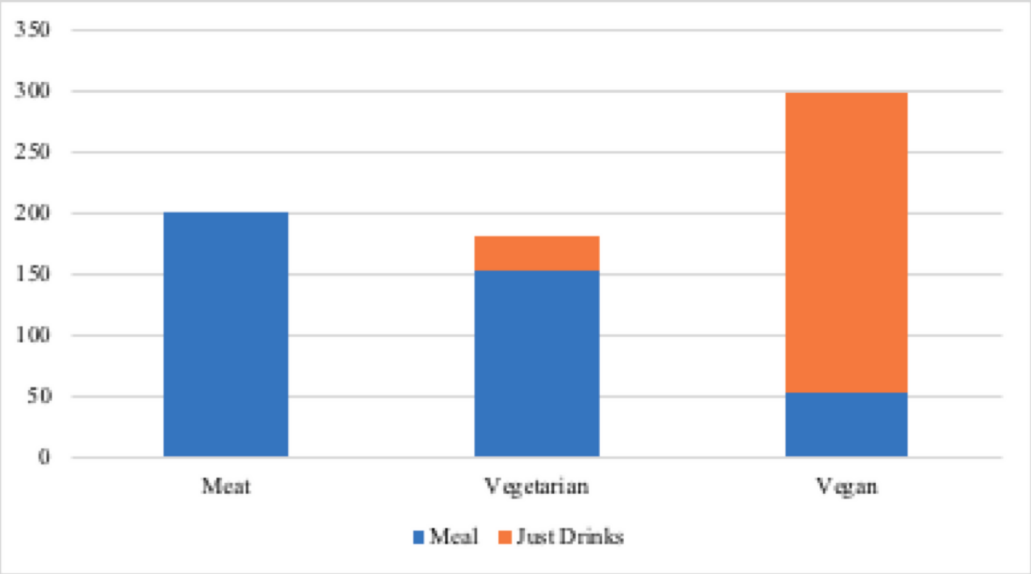
Patterns of meat-based, vegetarian, and vegan food and drink images

Overall, the image count suggests that vegetarian items are focused on in Kaluhi’s Kitchen and Pika Chakula, meat dishes and vegan drinks are focused on in Yummy Magazine, and meat is focused on in Evewoman. Please see Table 1, and Graphs 3-6.

That written, it is difficult to pin down trends across sources, likely because each source has a different purpose. For instance, while the milkshakes in the blogs seem remarkably different than the glasses of wine featured in *Yummy Magazine*, all are potable substances, and serve purposes beyond meeting physical needs. Additional questions concern if vegan and vegetarian items are somehow “less” than meat, or can be consumed on their own as deliciously “complete.” Image counts do not address these kinds of questions. The next section will review some of the themes that relate to the purposes of eating particular kinds of cuisine.

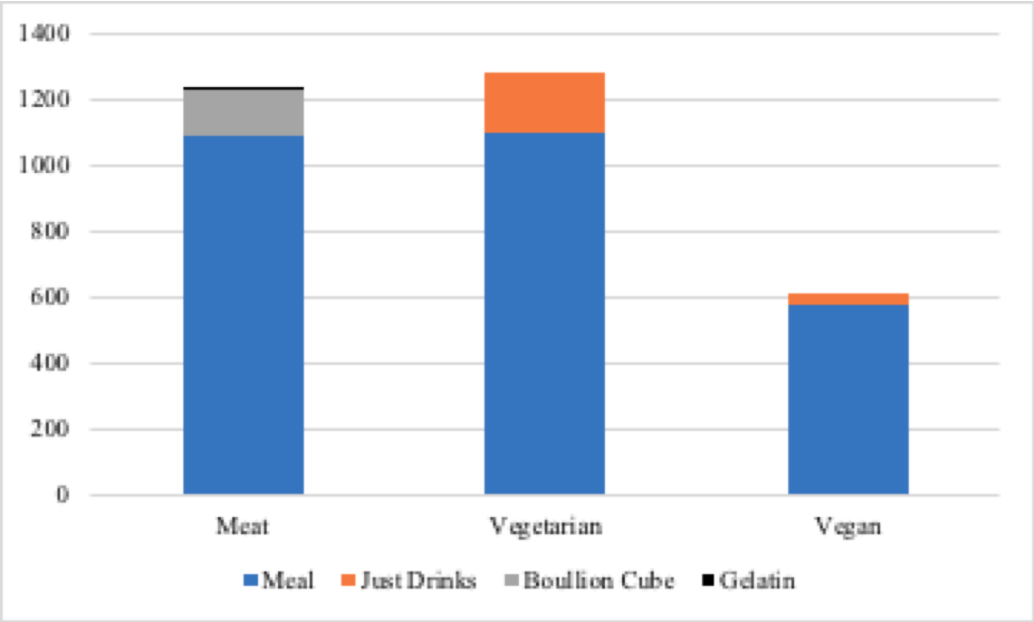
²⁹ Neuman and Robson 2012, p. 207

In terms of images of meat, vegetarian, and vegan food items, we see that for the issues examined of *Yummy Magazine*, most images are vegan, and there are 299 vegan images in total. Upon closer inspection, it becomes clear that more than 80% of the vegan images are of alcohol or coffee. Of the 182 vegetarian images, roughly 16% are of creamy drinks such as white coffee (i.e. coffee with whole milk poured into it). There are 201 images of meat. In this regard, more meat-based dishes are presented, but most images are of vegan drinks. *Please see Graph 3.*



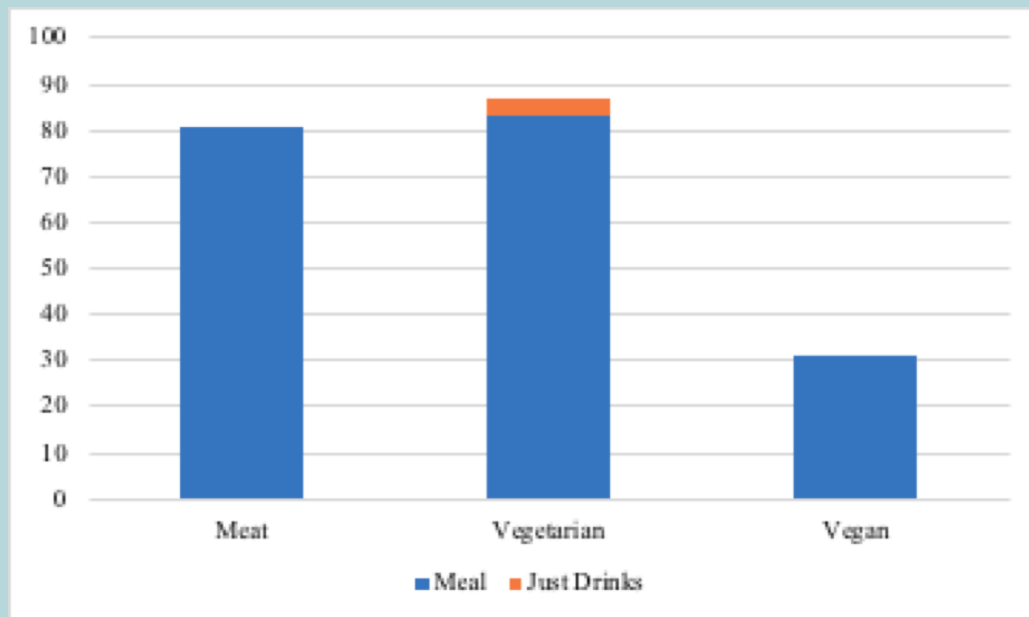
Graph 3: Number of meat-based, vegetarian, and vegan meal or standalone drink images in Yummy Magazine

It may seem that most images in the *Kaluhi's Kitchen blogs* relate to vegetarian recipes, as there are 1280 images related to vegetarian recipes versus the 1089 images related to meat-based recipes. In actuality, there are almost 150 images related to gelatin and bouillon, for a total of 1238 meat-based images. Roughly 15% of vegetarian images relate to drink recipes, and roughly 6% of vegan images relate to drink recipes. *Please see Graph 4.*



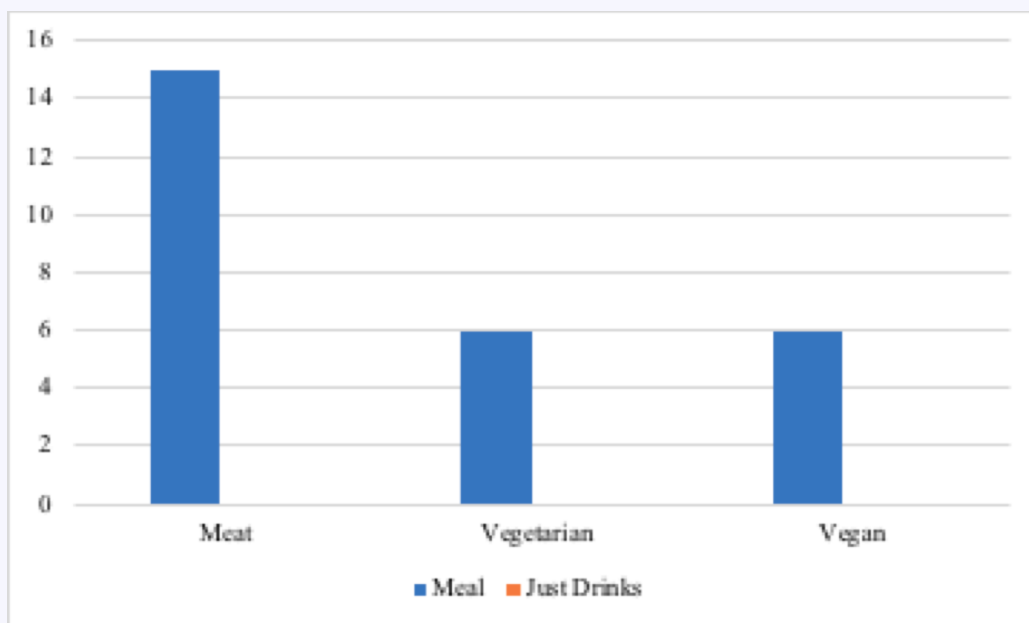
Graph 4: Number of images related to meat-based, vegetarian, and vegan food and drink recipes in Kaluhi's Kitchen

In contrast, in the *Pika Chakula* blogs that were examined, 81 images relate to a meat-based recipe, 83 to a vegetarian recipe, and 31 to a vegan recipe. Fewer than 5% of vegetarian images related to a drink recipe. Please see Graph 5.



Graph 5: Number of images related to meat-based, vegetarian, and vegan food and drink recipes in *Pika Chakula*

Of the *Evewoman* columns that were examined, 15 images related to a meat-focused recipe, 6 related to a vegetarian recipe, and 6 related to a vegan recipe. Please see Graph 6.



Graph 6: Number of images related to meat-based, vegetarian, and vegan recipes in *Evewoman*

Source	Meat	Vegetarian	Vegan
<i>Pika Chakula</i>	41%	44%	16%
<i>Pika Chakula</i> , drinks removed	42%	43%	16%
<i>Kaluhi's Kitchen</i>	40%	41%	19%
<i>Kaluhi's Kitchen</i> , drinks removed, bouillon counted as vegan, gelatin counted as vegetarian	38%	38%	24%
<i>Kaluhi's Kitchen</i> , drinks included, bouillon counted as vegan, gelatin counted as vegetarian	35%	41%	24%
<i>Yummy Magazine</i>	29%	27%	44%
<i>Yummy Magazine</i> , drinks removed from counts	49%	38%	13%
<i>Evewoman</i>	56%	22%	22%

Table 1: Images showcasing meat, vegetarian, and vegan cuisine per media source

Thematic findings across all media sources: Lifestyle and nation

Two main themes emerged in all sources, and these themes are lifestyle and nation. In general, lifestyle refers to how people engage in the world, including how people spend their time on food, enjoy food as pleasure and with whom. Nation refers to how Kenyans live in their country in ways that draw on the food options available in different areas, commemorate shared events through food, and support national industries.

Each media source presents complementary but distinct approaches towards lifestyle and nation. The themes for each source, and how these themes tie to meat-based, vegetarian, and vegan options, are as follows.



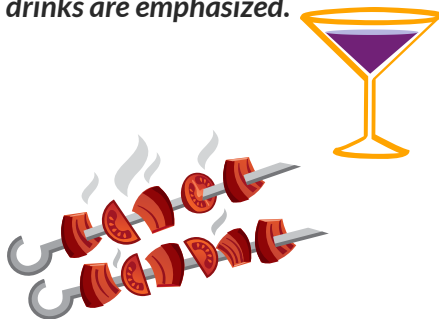
Findings: Thematic messages in *Yummy Magazine*

In Yummy Magazine, lifestyle involves treating food as an experience, rather than a means to address physical needs. Readers learn what celebrities eat, presumably to compare one's own habits with those of famous people. Lifestyle also involves impressing guests with a carefully curated selection of food and drink offerings at parties, and choosing restaurants that will offer status-laden dining experiences.

Readers are regularly informed of different events, including outdoor concerts, food festivals, and brunch gatherings. Audiences are also encouraged to watch football matches at bars and restaurants, and host event-themed get-togethers with food and wine. Travels within and outside of Kenya are chronicled, and readers are told what luxuries food columnists savored during their journeys. *Even if readers are meant to aspire to having these experiences, and not engage in them directly, they can make modifications to their own food practices to emulate standards around celebrity, events, entertaining guests, and travelling.*



When it comes to describing celebrity habits, there is a tendency to focus on meat-based dishes. Similarly, descriptions of dining while travelling, enjoying festivals or sports also emphasize meat. *In contrast, entertaining guests has less of an emphasis on meat, perhaps because meeting at cafes for coffee and bars for drinks are emphasized.*



If lifestyle involves having an experience through food, then nation involves expressing a particularly Kenyan dimension through food. For instance, the way that food is produced, prepared, and by whom is discussed, informing readers of how fast food burgers, whisky, honey and more makes their way into Nairobi's food environments. *Nation also means trying global delicacies,* such as French champagne, Chinese century eggs, or serving up fusion dishes, and taking a cosmopolitan approach to different cuisines.



While meat tends to feature most strongly in discussions of how items end up in Kenyan food environments, either in terms of how food is produced, or the traditions that gave rise to particular dishes, many vegetarian options are featured. When it comes to showcasing vegan food items, most descriptions are of the patrimony of non-animal based items focus on alcohol or coffee.



Findings: Thematic messages in *Kaluhi's Kitchen*

In Kaluhi's Kitchen, lifestyle revolves around family. The narrator explains how family members inspired recipes, and most often, describes how she put a twist on one of her mother's recipes. The blog provides recipes to feed picky children, as well as recipes that will please family members. Recipes that will impress guests and properly represent the family are featured. Through her own stories of fixing failed recipes, readers are encouraged to hone their cooking skills and try recipes that they may not be familiar with. Readers are also encouraged to pay attention to health, in terms of the nutritional value of ingredients, how bodies should respond to food qualities, and the quality of the dish or its ingredients.

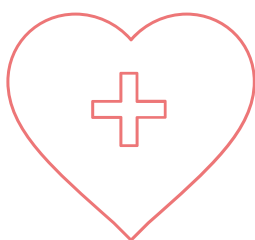
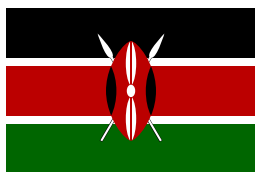
Meat is most often described as what the family wants, although vegetarian and vegan options are provided. Vegetarian recipes tend to be promoted as satisfying children more so than vegan or meat options. Vegetarian, vegan, and meat options are all recommended as pleasing guests, without one type of ingredient-focused cuisine emphasized more than another. Family recipes are typically vegetarian and meat-focused, but some vegan recipes are also described as inspired by a relative. Vegetarian recipes are most often recognized as linked to good health, followed by vegan and then meat recipes.

Recipes also express a Kenyan dimension through food, in describing food environments and seasonality. The narrator regularly mentions Kenyan brands and businesses, and the value of supporting them. Related to this is a call for readers to savor the season, and enjoy the fresh, tasty produce that is abundant in Kenya. Recipes showcase coastal and inland dishes, as well as rural and urban offerings. While some recipes are described as ethno-traditional, other recipes describe national food traditions, including what to serve on different holidays.

The blog is oriented to those living in Kenya and abroad. Kaluhi describes how she gets ingredients from different vendors, supermarkets, guests, household gardens, and from upcountry, and lets readers know that she can help them find ingredients. She also describes substitutes for locally-found ingredients like mala, and translates the names of ingredients into English. ***She describes the national origins of dishes, as well as how she incorporates Kenyan and East African flavours into recipes.***



While dishes using upcountry vegetables are typically vegan or vegetarian, recipes featuring Kenyan brands and businesses, traditions, coastal and urban differences, urban vendors and supermarkets typically feature meat. Moreover, fusion dishes typically feature meat. ***However, when it comes to seasonal eating, being given food from guests, or food from upcountry, vegetarian dishes are most often described.*** Vegan and vegetarian dishes are connected to supermarket shopping and Kenyan brands and businesses, but recipes with meat are discussed more prominently.



Findings: Thematic messages in *Pika Chakula* and *Evewoman*

In *Pika Chakula*, recipes are still oriented to lifestyle and nation. However, *the lifestyle focus is about achieving a goal with as little friction as possible*. The format of the blog matches this goal: recipes typically involve a quick paragraph about the author's experiences and/or recommendations for the dish, before ingredients and instructions are provided.

For many recipe columns, *Evewoman* provides a few lines as to why the recipe is recommended. *Recipes are described as convenient*: quick to make, easy to prepare, and effectively, something that each home cook should try. Recipes are also described as healthy either in terms of a statement of fact, or in terms of how a recipe will impact the body's performance. *Recipes for national festivities and from specific parts of Kenya are promoted*.



Pika Chakula recipes focus on **simplicity**, such how easy it is to make dishes. Recipes also focus on the time involved, such as whether dishes can be made quickly, and how they can address the demanding pace of life. The audience expected to enjoy different items are also identified, as food is described as perfect for get-togethers, children's parties, and other social events. Perhaps to meet the needs of grabbing food on the go, or having something for surprise guests, recipes for snacks are regularly featured. Brands are provided for at least one ingredient in most of the recipes, presumably helping readers easily choose the best product for the recipe.



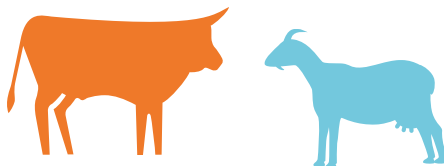
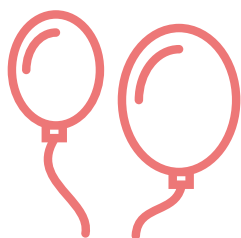
In *Pika Chakula*, when it comes to the origin of dishes, there is a tendency to focus on the origin of meat and vegan dishes more so than **vegetarian**. Recipes are most often described as African, Continental, or Indian, and much less often as European, American, or Mexican. Because there are many more meat and vegetarian recipes than vegan, and the provenance of vegetarian dishes is not as frequently identified, *there is a tendency to describe meat-based and vegan dishes as African and/or Kenyan*.



In *Pika Chakula*, meat dishes are most often described as simple, while vegetarian recipes are more frequently described as easy. Meat recipes tend to be provided for social gatherings, and vegetarian recipes for snacks.



In *Evewoman*, recipes that are described as convenient and healthy are both meat and vegetarian focused. However, all recipes about national festivities and from specific parts of Kenya are meat-focused. Vegan recipes do not feature in either of these themes.



Discussion

Dietary habits involve more than just attempts to nourish bodies: people use food to showcase and even gain status, as well as meet their family, health, and time-related demands. Moreover, food practices uphold and reinvent traditions, as people eat items tied to historical moments and patterned habits. ***Food practices both reflect on the past and are oriented towards the future.***

Each of the different media sources has a slightly different leaning. ***Yummy Magazine is very much focused on informing readers how food can be an experience.*** This means that readers learn how celebrities take their coffee, how to act as a good host and serve the latest food and drink trends to guests, and how to make memories over dinner through selective ordering practices, or through culinary adventures outside of the city.

Kaluhi's Kitchen focuses on relationships through eating. Recipes are learned from and tested on family, to ensure that families eat well. Recipes connect eaters with Kenyan traditions, and pride in building Kenya through their shopping and eating habits. However, recipes are also written to invite non-Kenyans to try recipes, and foster cosmopolitan, global connections.

In Pika Chakula, the culinary journey is focused on the end goal, and that goal is having tasty food ready for the particular occasion. ***Pika Chakula*** showcases recipes that meet the cooking needs of readers, whether needs involve having a quick snack for busy weekdays, or an easy-to-prepare recipe for guests.

Similar to Pika Chakula, ***EveWoman also presents recipes as a way to address a need,*** whether the need is to have a proper offering of food during a holiday, something that will not cause eaters to feel sluggish after eating it, or will be fairly quick and simple to make.

In terms of food needs, in these four sources, meat becomes an experience, either in terms of consuming it at restaurants and events, or preparing it for special moments and occasions. Vegetarian smoothies, desserts, and snacks are promoted, but less prominently as lifestyle and nation-oriented choices. Vegan items, except for alcoholic cocktails in Yummy Magazine, feature the least prominently.

Recommendations

Kenya has a vibrant food scene, with interest in eating Kenyan foods, promoting Kenyan food, and trying new cuisines. ***If the goal is to ensure that dietary practices support local food systems, in ways that prevent the “Westernized” diet and/or nutrition transition, then supporting food culture matters.***

One way of promoting food habits is by establishing annual vegetarian and/or vegan food festivals. In one study, the authors found that agri-food festivals can be distinguished from other cultural festivals in that attendees seek “agricultural exposure and education” alongside “lifestyle, escape and socialisation” opportunities (p. 8)³⁰. Food festivals offer an opportunity to connect eaters with producers, restaurants, and home-cooks. Such festivals have the potential to support tourism efforts and strengthen rural agriculture³⁰. In Kenya, festivals can build on already existing food events alongside national momentum to support Kenyan produce, brands, and industries.

A second way of promoting food habits is by supporting people with culinary talent via awards. For instance, annual awards for recipes on vegetarian and vegan lunches, dinners, party snacks and desserts may inspire chefs to create new recipes. There are already a few awards for blogs, including the BAKE awards (Bloggers Association of Kenya), and any award initiative can complement pre-existing awards. Moreover, the review of media suggests that recipes meeting lifestyle demands such as ease, speed, feeling after eating, and national demands such as seasonality and brands will be more likely to meet the needs of audiences.

A third way of promoting food habits is by supporting restaurant weeks. In urban centers, restaurant weeks encourage participating restaurants to provide a special menu for customers that either provides discounts, or offers new dishes. Making an event of vegetarian and vegan dining can raise the experience-offering profiles of these cuisines.

All of these strategies work towards moving beyond vegetarian and vegan cuisine as food trends³¹. ***Moreover, these strategies can integrate the lifestyle and Kenya-focused themes expressed in reviewed media sources.***

³⁰ Fourie and Kruger 2014

³¹ Star Reporter 2019

Appendix A: Counting Images

To better understand the kinds of messages broadcast to audiences, researchers examine how often a message appears as well as the different ways a message is communicated. The first part of this project calculated the frequency of images of meat, vegetarian, and vegan dishes. If a type of dish is rarely shown, then this suggests that for some reason, the dish is not recommended. Likewise, if a type of dish is regularly shown, then this suggests that for some reason, the item is being promoted.

In this project, the number of images tied to meat, vegetarian, and vegan dishes were counted. In order to know what exactly counts as each dish, and to improve reliability, rules of how to classify images and what to count were established. For this project, images were counted as meat when obvious pieces of dead sea or land animals were presented. For example, meat would refer to a skewer of roasted goat meat, or a hamburger. Images were counted as vegetarian if the dish had honey, eggs, milk, yogurt, or other animal-based ingredients, but not obvious pieces of flesh. For instance, a slice of cake or a cheese platter was classified as vegetarian. Dishes and drinks were counted as vegan if they had no obvious animal-based products. For example, images of glasses of wine and fruit platters were classified as vegan.

An image may contain more than one dish type. In these cases, deciding the applicability of a category involves addressing the following questions: Could someone observing a vegan diet, based on vegan defined above, partake in the dish in its entirety? If not, could someone observing a vegetarian diet, based on vegetarian as defined above, partake in this dish in its entirety? If not, could a meat eater partake in this dish in its entirety? If multiple dishes were shown in the same image, such as separate plates of githeri (i.e. bean stew) and a hamburger, then the image was classified as both vegan and meat.

This approach to classifying images is not foolproof, and there is room for error. For example, gelatin is used in desserts and is made from dead animals. Based on the classification scheme, dishes containing gelatin would be classified as vegetarian or vegan, and not meat. Additionally, when classifying images, researchers draw on their own expectations of whether dairy, coconut cream, honey, eggs, and more are used.

While the counts may not perfectly reflect the number of times a meat, vegetarian, or vegan dish was shown in the different texts, they are an important first step in exploring the presentation of animal-based and non-animal-based dishes in popular media.

Appendix B: Assessing Themes

After obtaining counts of the number of times meat, vegetarian, and vegan dishes appeared in each text, the next step was to examine the thematic messages linked to these dishes. The first step of this process involved simultaneously gathering and analyzing data by reading each text for emerging themes. After reading all blogs, columns, and magazine issues, it was apparent that food and drink in general were tied to messages around the following themes: lifestyle and nation.

To then code texts based on the thematic messages they conveyed, it was necessary to create additional sets of rules of what text content could be coded, and what the codes referred to by identifying and defining thematic codes. "A coding system is a set of instructions or rules on how to systematically observe and record content from text"²⁹ (p. 208-209).

The content to be analyzed thematically include the recipes and written descriptions provided in *Kaluhi's Kitchen*, *Pika Chakula*, and *EveWoman*, and not their photos. These blogs and column are collectively focused on recipes, and the first read revealed that the photos reflected the recipe being described. In contrast, *Yummy Magazine* has advertisements that convey a variety of messages through visual displays. For *Yummy Magazine*, all written descriptions (restaurant reviews, main features, interviews, and more) were analyzed thematically, as were visual images. *Dedoose* is an online mixed methods analysis program, and was used to select written or image-based content, and apply codes to these images. (Please see <https://www.dedoose.com/> for how-to videos and other information.)

As the goal of this project was to better understand the themes in play around animal and non-animal based foods, in the second read of texts, content was coded as meat, vegetarian, and vegan based on the definitions in Appendix A. Content was also coded as nation and/or lifestyle. Nation refers to how Kenyans live in their country in ways that draw on the food options available in different areas, commemorate shared events through food, and support national industries.

general, lifestyle refers to how people engage in the world, including how people spend their time on food, enjoy food as pleasure and with whom.

However, each text source appeared to have variations in nation and lifestyle. For instance, lifestyle in *Kaluhi's Kitchen* revolved around family, including representing the family by being hospitable to guests. Sub-codes include: making for children, making for guests, learned from mom, and making what the family wants. In contrast, in *Yummy Magazine*, lifestyle revolves around experiences. Sub-codes for *Yummy Magazine*, lifestyle, include: celebrity, entertaining guests, festival or local event, sports, and travel. Please see Table 2 for an example of sub-theme codes.

While this coding process is time consuming, it improves reliability by forcing researchers to explain what aspects of the texts will be analyzed (i.e. the content), what a theme captures (i.e. defining codes), and the range of ways a theme is expressed (i.e. sub-codes). This process helps researchers to be aware of nuanced messages, and explain their specifics.

Table 2: Sub-codes for lifestyle
in *Kaluhi's Kitchen*

Making for children	Explicit statement that the recipe was made for children, or should be made for children
Making for guests	Explicit statement that the recipe has been or should be made for company, whether company is extended family dropping by, neighbors, friends, or more, planned and unplanned visitors
Learned from mom	Explicit statement that the recipe was taught or inspired by mother, or another relative
Making what the family wants	Explicit statement that the family enjoyed the recipe or the recipe should be made for the family to enjoy

Appendix C: Guide on how to count images

- When we as researchers count the number of times a word, statement, or image appears, we want our totals to be as reliable as possible.
- We take steps to ensure that if another researcher were to count the same items, or if we counted the items a second time, we would get very similar totals.
- We need to make judgments about what to count and how so, since there are multiple possibilities.
- We must explain what we counted so that another reader could work through our steps, if that reader chose to do so.

1) In order to count in a way that is reliable, we first decide what selection of texts we are going to count. For example, do we count all images in a magazine, or a subset of images? Put differently, do we count the images that appear on the cover, in advertisements, and throughout the magazine, or just advertisements?

2) Next, we create rules about what we will look for in the selection of texts. We may count the number of times we read a word, statement, or see an image. We have to decide if we will include a word's synonym, or the variations of images that we will accept.

For example: This project is interested in the messages broadcast about animal and non-animal-based food in popular Kenyan media. Counting the number of times animal-based and non-animal based food appears gives a sense of how popular items are. Caution: It is possible to argue that an image of a turkey dinner with vegetable sides and wine is also “vegan,” since someone observing a meat-free diet could skip the turkey and enjoy the other offerings. If food images were counted this way, the overall count would suggest to readers that a “vegan” meal was explicitly broadcast in an image more frequently than was actually depicted. Thus, it is very important to describe to readers what was actually included in each count, how so, and why, so that readers understand the steps you took.

In the previous example of the turkey dinner, if your hunch is that it would be worthwhile to count similar images as “meat” and “vegan,” then it would be wise to create an additional category, such as “vegan possibility.” In the methodology, you would define what “meat,” “vegetarian,” “vegan,” and “vegan possibility” applied to. You would explain that images that had animal flesh as well as non-animal products for non-meat eaters were coded as both “meat” and “vegan possibility.”

Appendix D: Guide on how to code themes

In order to consistently code thematic messages, it is important to create a coding scheme that:

- Identifies what aspects of sources will be coded
- Defines thematic codes, as well as sub-codes.

Say you are interested in learning how fast food is described to audiences. You choose to examine a magazine in order to learn more about how fast food is described in popular media. First, it is important to decide what sections of the magazine will be analyzed, and let readers know what sections you choose. It is also important to decide if visual and/or written cues will be analyzed.

Thematic coding involves paying attention to the descriptions, both obvious and subtle, that are connected with fast food. For instance, an article may describe fast food in the context of a profitable restaurant brand, or what a celebrity eats, or what to eat on a date. While all of these articles may convey the theme of “success,” and be grouped under the code “success,” it is obvious that “success” can be further distinguished by sub-codes. In this example, sub-codes include “finance,” “fame,” and “relationship.”

Corbin and Strauss³² describe the process of identifying themes (i.e. parent codes: in this example, “success”) and breaking them into sub-themes (i.e. sub-codes: in this example, “finance,” “fame,” “relationship”) as “open coding”. Because the process of open coding forces researchers to define “success” and ask how “success” manifests in fast food-related messages in the magazine, researchers are more likely to be attuned to different ways that “success” is broadcast in the magazine³². Researchers must continually ask themselves what coding category content fits into, and explain how content does and does not fit. Researchers create a coding system that defines each code and sub-code, and what content will be coded, so that any reader could repeat the project if they so choose.

Different software programs, such as Dedoose and NVivo, allow researchers to highlight words and images, and apply codes to the words and images. With thematic coding, researchers are typically less concerned about the strict number of times a code appears, and are more concerned with patterns in the relationships between codes and content, such as the ways “success” is used to describe fast food.

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